



# California Morbidity



Department of Health Services  
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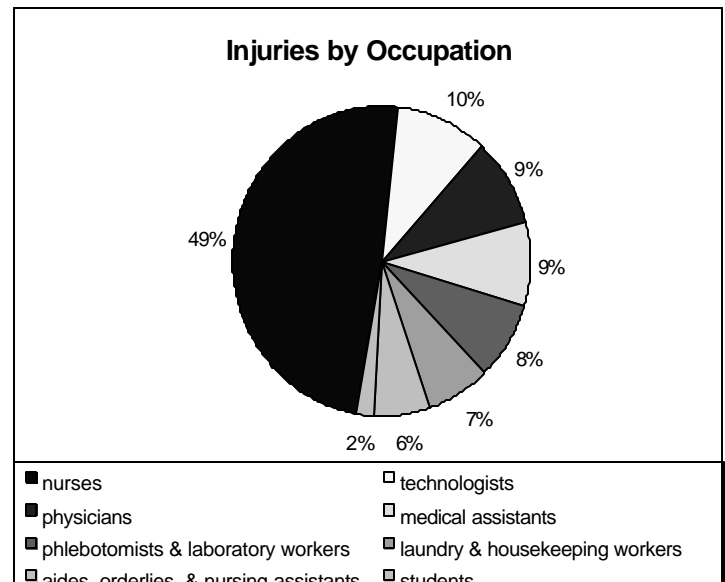
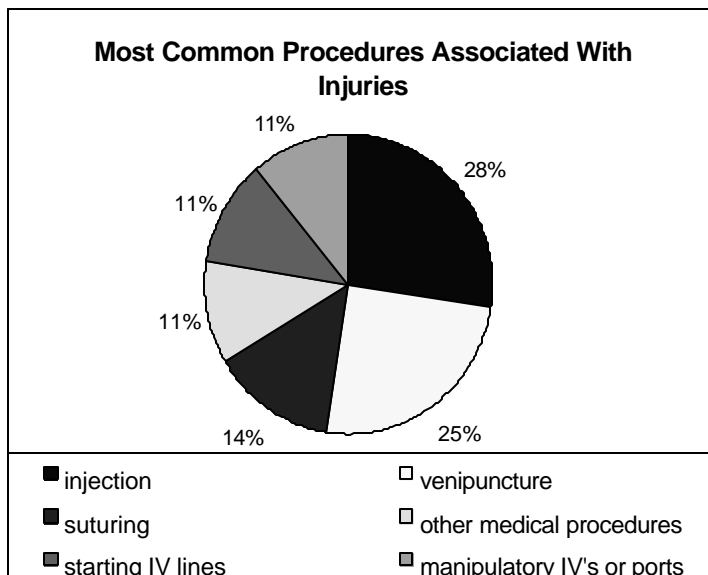
## Needlestick Injury Surveillance in California, 1998-1999

In 1997, DHS established the first statewide program to prevent needlestick injuries. Over the past three years, the Sharps Injury Control Program has documented and evaluated needlestick and other sharps injuries to health care workers in California and conducted a survey of all acute care hospitals, home health care agencies, and skilled nursing facilities regarding their data collection techniques and safety device use. The Sharps Program has provided educational materials and training for healthcare institutions and providers about work practices found to be effective in reducing occupational sharps injuries. The program created an interactive list of needleless systems and safety-enhanced needle devices available through the DHS website, and compiled and disseminated up-to-date resources for medical device evaluation.

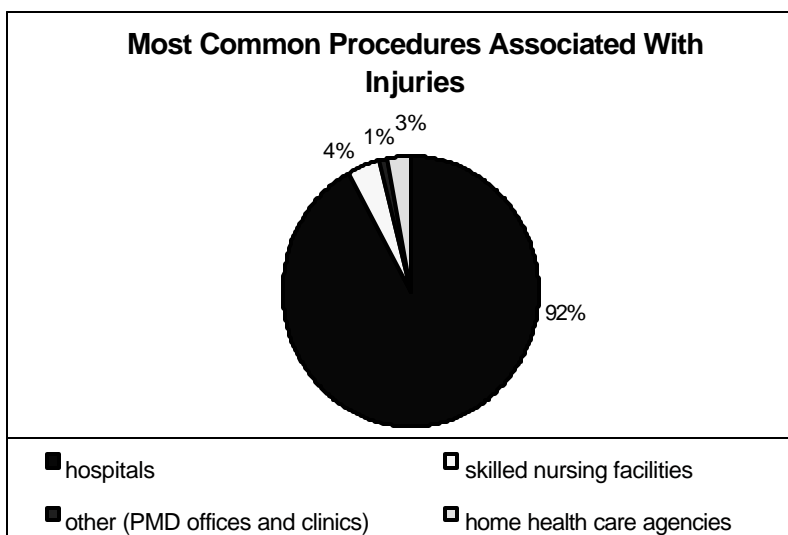
DHS collected information on 1951 needlestick injuries occurring between January 1, 1998, and December 31, 1999. The data was voluntarily submitted from 316 of the over 3000 licensed acute care hospitals, home health care agencies, and skilled nursing facilities in the state. Data was thus collected before and after the effective date of the revisions to the California Bloodborne Pathogens Standard (July 1, 1999), that included a provision that needleless systems and safety-enhanced needle devices be used in all health care settings.

Data was collected from facilities in many varied formats, with only 25% of the data reported on the DHS Sharps Injury Log, necessitating extensive recoding of specific data fields in over two thirds of reported cases. Information such as brand and model of needle device were often unknown to the injured healthcare worker. Nevertheless, this data represents the largest and most complete statewide picture of needlestick injuries to health care workers yet assembled in the U.S.

Source: Department of Health Services



Source: Department of Health Services



A total of 511 of the injuries involved an injured employee who was not the original user of the device. For those for whom data could be ascertained, equipment or instrument cleaning (24%), assisting in procedures (23%), removing trash (12%), and room cleaning (12%) were the most common activities associated with such injuries. Injuries occurred during use of the sharp device (27%), after use but before disposal (23%), encounters of sharps in inappropriate places (17%), while placing sharps in disposal containers (11%), cleaning equipment (6%), and recapping a needle (6%). In 82% of the reports, the finger was the injured body part, the hand in 14%, and other sites in 5%. Disposable needles/syringes were identified in 32% of injuries where a device was named, other undefined needle in 14%, IV catheter in 9%, suture needle in 8%, butterfly needle in 7%, scalpel in 6%, and vacuum tube collection needle in 5%. These proportions are very similar to national data from the Exposure Prevention Information Network, based at the International Health Care Worker Safety Center, University of Virginia, Health Sciences Center and by the National Surveillance System for Health Care Workers, maintained by the Centers for Disease Control in Atlanta, Georgia.

Uniquely, the Sharps Needlestick Registry collected information about employees' opinions regarding possible measures to prevent their particular injuries. When asked if a safety device could have prevented their injury, 67% said "yes." A total of 73% felt that engineering, administrative or other work practice control could have prevented the injury. Human factors/behaviors were identified by 25% as playing a role in preventing such injuries, as well as proper disposal (21%), improved sharps disposal container placement (6%), avoiding recapping (5%), improved injury and illness prevention protocols (5%), defective or improperly used sharps devices (4%), and improved staffing /training (3%).

The Sharps Needlestick Registry has served as an early warning system for device or design related injuries, enabling reporting to the U.S. Food and Drug Administration regarding devices that may require further review. It has identified the job classes, procedures and work activities that continue to put health care workers at risk for bloodborne pathogen transmission.

A copy of the final report to the Legislature from the Sharps Injury Control Program will be sent to the participating facilities. Copies may be requested from the Occupational Health Branch, or on the DHS website at <http://www.dhs.ca.gov/ohb>. Also available on the website and, as a joint service of the DHS/Department of Industrial Relations, is a continuously updated list of available sharps with engineered safety protection and needleless systems, to facilitate selection by health care facilities of appropriate safety medical devices. Other web resources currently available include a Question and Answer Fact sheet on the revised Bloodborne Pathogen Standard and new model exposure control plan for health care facilities; both available on the web at <http://www.dir.ca.gov>. The National Institute for Occupational Safety and Health has published an Alert: Preventing Needlestick Injuries in Health Care Settings (DHHS [NIOSH] Publication No. 2000-108), available on the web at <http://www.cdc.gov/niosh/2000-108.html>.

Health care institutions will continue to play a major role in achieving the Centers for Disease Control and Prevention's goal of reducing the number of unintended needlesticks to health care workers to zero by 2010. Activities that institutions may undertake to help reach this goal include:

- (1) Being aware of new safety devices and needleless systems.
- (2) Insuring continuous in-service training of health care workers on effective use of new safety enhanced devices.
- (3) Maintaining surveillance of facility-specific needlestick injuries using the recommended sharps injury log, and analyzing the injury data on a periodic basis, at least once per year to identify new areas of concern and opportunities for prevention.
- (4) Developing periodically revised exposure control plans based on the new model Cal/OSHA plan and as technology advances.
- (5) Attending, the informal Sharps Injury Control Program Stakeholder meetings to discuss common issues and share institutional experience related to implementing safer devices. Meetings occur twice per year, alternating between Southern and Northern California. For more information, or to place your name on the Sharps Mailing List, contact James Cone, Chief, Occupational Health Branch, 1515 Clay Street, Suite 1901, Oakland, California 94612, (510) 622-4319, [jcone2@dhs.ca.gov](mailto:jcone2@dhs.ca.gov).

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